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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,442	12/03/2003	Barrington Herman	WEYE121980/24877	7117

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EXAMINER

GELLNER, JEFFREY L

ART UNIT PAPER NUMBER

3643

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/727,442

Applicant(s)

HERMAN, BARRINGTON

Examiner

Jeffrey L. Gellner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>16 December 2004</u> . | 6) <input checked="" type="checkbox"/> Other: <u>See Continuation Sheet</u> .           |

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## **DETAILED ACTION**

### ***Information Disclosure Statement***

The IDS received 16 December 2004 is acknowledged. The references were marked through because they were cited by the Examiner on the 892 that accompanied the first office action.

### ***Claim Rejections - 35 USC §103***

The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 7, and 8 are rejected under 35 U.S.C. §103(a) as being unpatentable over Cuenca et al. (Plant cell, tissue, and organ culture) in view of Saul et al. (Forest research note; document 25 on Applicant's 1449).

As to Claim 1, Cuenca et al. discloses a method or promoting growth of shoots (abstract) by applying a cytokinin (abstract) to *Fagus* shoots (abstract). Not disclosed is the shoot from a log. Saul et al., however, discloses using a log ("cuttings" of Saul et al.) as a source for propagation. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Cuenca et al. by using a log as disclosed by Saul et al. so as to have a practical way of propagating cutting of alder with both shoots and roots so as to increase the developmental speed of improved genotypes (see Saul et al.).

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As to Claims 7 and 8, Cuenca et al. as modified by Saul et al. further disclose benzylaminopurine ("BA" of Cuenca et al.).

Claims 2-6, 9, 10, and 13 are rejected under 35 U.S.C. §103(a) as being unpatentable over Cuenca et al. (Plant cell, tissue, and organ culture) in view of Saul et al. (Forest research note; document 25 on Applicant's 1449) in further view of Bryan et al. (HortScience).

As to Claim 2, 3, and 5, the limitations of Claim 1 are disclosed as described above. Not disclosed is the cytokinin applied intermittently to the log as an aqueous solution. Bryan et al., however, discloses applying intermittently the cytokinin as an aqueous mist (abstract) in a woody species. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the method of Cuenca et al. as modified by Saul et al. by intermittently misting an aqueous solution of the cytokinin so as to increase the duration and extent of seedling growth (see abstract of Bryan et al.).

As to Claims 4 and 6, it would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the method of Cuenca et al. as modified by Saul et al. and Bryan et al. by either applying continuously or once per week so as to optimize the method to meet a particular goal without undue experimentation.

As to Claim 9, Cuenca et al. as modified by Saul et al. as further modified by Bryan et al. further disclose the concentration of the solution from 5 - 100 mg/L ("50 ppm" of abstract of Bryan et al.).

As to Claim 10, Cuenca et al. as modified by Saul et al. and Bryan et al. further disclose benzylaminopurine ("BA" of Cuenca et al. and of Bryan et al.).

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As to Claim 13, the limitations of Claim 1 are disclosed as described above. Cuenca et al. further disclose the cytokinin as benzylaminopurine ("BA" of abstract). Not disclosed is the concentration of the cytokinin from 5-100 mg/L and applied as a mist form once to three times a week. Bryan et al., however, discloses applying intermittently a cytokinin as an aqueous mist (abstract) to a woody species at a concentration of from 5 to 100 mg/L (abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the method of Cuenca et al. as modified by Saul et al. by intermittently misting an aqueous solution of the cytokinin at from 5 to 100 mg/L so as to increase the duration and extent of seedling growth (see abstract of Bryan et al.) and to apply from once to three times a week for as least three week so as to optimize the method.

Claims 11 and 12 are rejected under 35 U.S.C. §103(a) as being unpatentable over Cuenca et al. (Plant cell, tissue, and organ culture) in view of Saul et al. (Forest research note; document 25 on Applicant's 1449) in further view of Bryan et al. (HortScience) in further view of Applicant's Specification.

As to Claim 11, the limitations of Claim 2 are disclosed as described above. Not disclosed is the cytokinin's concentration from 0.5 to 10 mg/L. Applicant, however, discloses that cytokinin can be applied at from 0.5 to 10 mg/L without undue experimentation (page 4 lines 7-20). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the method of Cuenca et al. as modified by Saul et al. and Bryan et al. by applying the cytokinin from 0.5-10 mg/L so as to optimize the method.

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As to Claim 12, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Cuenca et al. as modified by Saul et al., Bryan et al., and Applicant's Specification by using 2iP so as to optimize the method.

Claim 14 is rejected under 35 U.S.C. §103(a) as being unpatentable over Cuenca et al. (Plant cell, tissue, and organ culture) in view of Saul et al. (Forest research note; document 25 on Applicant's 1449) in further view of Wang (HortScience).

As to Claim 14, the limitations of Claim 1 are disclosed as described above. Not disclosed is applying N fertilizer at no more than 0.01% (w/v) nitrogen to the log. Wang, however, discloses the use of N fertilizer with foliar applications of BA. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Cuenca et al. as modified by Saul et al. by adding N fertilizer to the method as disclosed by Wang so as to accelerate growth rates and to use 0.01% N sources so as to optimize the method.

### ***Response to Arguments***

Applicant's arguments filed 15 February 2005 have been fully considered but they are not persuasive. Applicant's arguments are: (1) modifying Cuenca et al. to incorporate the use of a log would render the Cuenca et al. method unsatisfactory for its intended purpose (Remarks page 2, 4<sup>th</sup> para.); (2) cuttings from a 20 to 25 year old tree as used by Saul et al. are physiologically different from internodal segments of shoots that have been continuously cultured on growth medium in vitro (Remarks page 3, 1<sup>st</sup> complete para.); and, (3) it would be impractical, if not

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impossible, to culture, in vitro, logs have the dimensions of Saul et al. (10-16 cm long) (Remarks page 3 3<sup>rd</sup> complete para.).

As to arguments (1) and 3, Examiner disagrees that to incorporate the use of a log would render the Cuenca et al. method unsatisfactory, or impractical, for its intended purpose because the last paragraph of the "Introduction" section (on page 214, col. 1) Cuenca et al. states that "[s]hoot cultures of juvenile origin were used as an intermediary step on obtaining bud regeneration from adult material in the field." Hence, Cuenca et al. has a goal of using a log, adult material, which, in fact, Saul et al. discloses.

As to argument (2), the cutting from older planter material may be physiologically different from internodal segments of shoots that have been continuously cultured on a growth medium in vitro but, since the goal of Cuenca et al. is to use adult material, one of ordinary skill in the art would have found it obvious to alter the method of Cuenca et al. to use logs.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

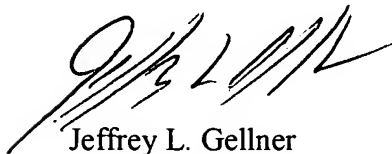
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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Jeffrey L. Gellner whose phone number is 571.272.6887. The Examiner can normally be reached Monday through Thursday from 8:30 am to 4:00 pm. The Examiner can also be reached on alternate Fridays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Peter Poon, can be reached at 571.272.6891. The official fax telephone number for the Technology Center where this application or proceeding is assigned is 703.872.9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jeffrey L. Gellner  
Primary Examiner